

OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY (OE)
U.S. DEPARTMENT OF ENERGY
Hurricane Katrina Situation Report #21
September 5, 2005 (11:00 AM EDT)

HIGHLIGHTS

- Approximately 1 million customers remain without electric power due to Hurricane Katrina in Alabama, Louisiana, and Mississippi, or 21 percent of customers. (See table below). This is down by 1.7 million from a peak of about 2.7 million customers that were without power after Hurricane Katrina struck the region.
- New Orleans remains largely without power; however, Entergy crews returned to the city for the first time since the hurricane hit. The crews began arriving at 7:30 a.m. CDT 9/4/05 to begin assessing damage and restoring power. The crews, who handle the preparatory work prior to reestablishing electricity service, along with National Guard escort vehicles, formed at the toll booths of the Crescent City Connection Bridge on the West Bank of the Mississippi River and then preceded across the river into the city.
- Entergy in Louisiana reports that a number of vital facilities have been restored in the greater New Orleans metro area, including the West Jefferson Hospital, the East Jefferson General Hospital, Ochsner Clinic Foundation, Louis Armstrong International Airport, Jefferson Parish Emergency Operations Center and all but three of the 11 refineries served by Entergy in the affected area.
- Entergy Transmission is preparing a plan to restore power to strategic substations in the central business district of New Orleans. Security issues and brackish flood waters continue to have a major impact on restoration efforts in the greater New Orleans area.
- Entergy reports a total of 489,788 Louisiana customers without power; 6,900 poles requiring replacement; 9,950 pole-to-pole sections of wire down; and 1,385 damaged transformers. These numbers do not include New Orleans, where assessment continues in accessible portions of the city.
- The Fuel Task Force was established at FEMA HQ to assist the FEMA Regional Operations Centers (in Regions 4 and 6), as well as State Emergency Operations Centers, to address issues associated with the supply of fuel (diesel, gasoline and propane) in support of emergency response operations. DOE, including its staff at FEMA HQ and at emergency centers in the disaster area, is working closely with FEMA on this task force to examine and mitigate emergency fuel supply issues. In addition, the task force has begun to work with the Louisiana Department of Agriculture, which has taken the lead (from the FEMA VI ROC) to handle emergency fuel logistics in Louisiana. Currently, the FEMA IV ROC and the Louisiana Department of Agriculture are reporting that they have begun to meet fuel supply requirements in their regions, although the task force meets with these organizations daily to assess conditions. Security issues associated with fuel supply and distribution are being reported to the US Army National Guard.

- Secretary Bodman announced late Friday (9/2/05) that President Bush has authorized the Department of Energy to draw down and offer for sale petroleum from the Strategic Petroleum Reserve. The initial offer is for about 30 million barrels of oil; however, the President's finding does not limit the drawdown and sale to only 30 million barrels, or limit the drawdown to any particular time period. The public sale process will begin on Tuesday (September 6). The Secretary emphasized: "While we are taking steps in the right direction, Americans should continue to be prudent in their energy usage during the course of the next few weeks."

- The Department of Energy has already entered into six separate agreements to loan oil from the Strategic Petroleum Reserve. The crude oil will be loaned from the SPR under short-term contractual agreements and returned to the Reserve once supply conditions return to normal.
 - ExxonMobil Corp. -- 3 million barrels of "sweet" crude and 3 million barrels of "sour" crude.
 - Placid Refining -- one million barrels of sweet crude.
 - Valero -- 1.5 million barrels of sweet crude.
 - BP -- 2 million barrels of sweet crude
 - Marathon -- one million sweet and 0.5 million sour barrels.
 - Total Petroleum -- 0.15 million barrels of sweet and 0.45 million barrels sour crude.

- The LOOP has been operating at 75 percent capacity since Friday evening after Entergy restored power to the Clovelly storage facility. The LOOP expects to be at 100 percent capacity when Port Fourchon becomes operational which should occur in about 7 days. LOOP deliveries to the Capline pipeline were scheduled to begin yesterday. The LOOP and Capline are prepared to make deliveries to local refineries as needed. The LOOP has also reported that tankers were delivering crude oil over the weekend.

- Colonial Pipeline continues to add capacity to both its gasoline and distillate Main Lines, which are now operating at approximately 73% of normal capacity. Distributed generating equipment is now being brought on line, and additional power generation will continue to be brought on line over the next 24 hours. Colonial plans to achieve 100 percent of normal capacity by tonight (9/5/05.)

- ESF-12 was activated by the Federal Emergency Management Agency to support multiple locations. OE staff are at the National Response Coordination Center (NRCC) at FEMA HQ, FEMA Regions IV and VI, and the State Emergency Operation Centers (EOC) in Alabama, Louisiana, and Mississippi. OE has issued a call to secure additional staff to supplement and/or replace current, on-site personnel in certain areas with special emphasis on electrical engineers within the Power Marketing Administrations and the Tennessee Valley Authority.

- There are two more tropical waves forming to the east of the Caribbean and another stationary front of the south east coast of Florida. While it is much too soon to make a prediction, forecasters indicate that conditions are favorable for the formation of tropical

depressions. We are watching this very carefully, particularly the formation closest to the Florida coast.

PETROLEUM AND GAS INFORMATION

- MMS will issue its next report on today at 1:00 pm CDT.
- According to the Association of Oil Pipelines, the Dixie Pipeline (a propane line) is operating at approximately 50% (2 million gallons per day) of normal capacity.
- As of 9:00 pm last night at least 55 miles of the Gulf Intracoastal Waterway was still closed to navigation (from Mile Marker 15 to Mile Marker 70.) This is in the area between the Lower Mississippi and Gulfport, Mississippi. The US Coast Guard is surveying the waterway and replacing navigational aids at a rate of about 20 miles per day. At this rate the entire waterway should be open between the Lower Mississippi and all points east by the end of Wednesday. The Port of Gulfport is still closed and the Port of Pascagoula is only allowing vessels to operate in the day, if they have draughts of less than 12 feet. Other ports east of Pascagoula (in AL and FL) are open.
- Port of Mobile is operating during daylight hours only with temporary navigation aids in place. The US Army Corps of Engineers is currently dredging the channel so that Shell Oil company's dock can receive a 40-foot draught crude oil tanker (arriving in a few days), to traverse channel and safely dock and unload. Currently the channel to Shell can only take ships with a draught of 38 feet or less.
- Refinery table will be updated in the afternoon report.

ELECTRICITY INFORMATION

STATE OUTAGE DATA

| Utility | Customers w/o Power | % Customers w/o Power from Katrina |
|----------------|----------------------------|---|
| Alabama | 40,823 | 2% |
| Louisiana | 587,425 | 56% |
| Mississippi | 422,174 | 30% |
| Total | 1,050,422 | 21% |

*Louisiana data is reported by the Louisiana Public Service Commission and their percentage outage numbers are used in the table and in calculating the percentage of total outage.

STATE REPORTS

Alabama

- In Alabama, about 40,823 customers remain without power. This represents 2 percent of total customers in the state.

- Alabama Power Company has restored power to 95 percent of its customers statewide who were affected by Hurricane Katrina. As of 11:00 a.m. Sunday 9/4/05, 34,591 customers remained without power statewide, down from a peak of 636,400. The company anticipates ninety-nine percent of all Alabama Power customers will be restored by September 7.
- Alabama's transmission system now has restored service to all load serving substations but one, which was heavily damaged.
- Cooperatives and Municipals report two percent or less of customers remain without power.

| | Total # of Customers | Peak Outage | Current Outage | % Outage | % of Customers Restored |
|---------------|----------------------|-------------|----------------|----------|-------------------------|
| Alabama Power | 1,400,000 | 636,400 | 34,591 | 2.4% | 98% |
| Coops | 491,500 | 116,409 | 6,232 | 1.3% | 98% |
| Municipals | 495,000 | 115,000 | ** | 2% | 98% |
| TOTAL | 2,386,500 | 867,809 | 40,823 | 2.4% | 98% |

Mississippi and Louisiana

- Louisiana has 587,425 customers remaining without power as reported by the Louisiana Public Service Commission (12:00 AM 9/5). This represents about 56 percent of customers in the state. About 461,000 of these are serviced by Entergy. See below for information on Entergy progress.
- As of 10 AM September 5, Mississippi has approximately 422,174 customers without power, 30 percent of customers in the state. Of these, 62,110 are Entergy customers; 129,293 are Mississippi Power customers; 221,486 are Mississippi Electric Power Association customers; and 9,285 are TVA customers. Mississippi Power estimates that it may take as long as four weeks to restore power in hard-hit areas.
- Entergy has several fossil-fueled plants in areas affected by Katrina. The company is aggressively working to match generation supply with power demand. At this time, fuel supplies to the generating plants are adequate.
- At 4:00 PM 9/4/05, Entergy's transmission system had 62 lines and 48 substations out of service. All Mississippi substations are in service as of 9/4/05.
- Aerial inspections are nearly complete in New Orleans and the remaining inspections will be completed today. Transmission service is being reestablished around the Waterford generating complex, which is necessary to return those plants to service. Portions of the transmission system going west from Bogalusa toward Franklinton, Louisiana have been reenergized.

- Progress has been made in the emergency, governmental and special needs areas in Jefferson Parish. Entergy has restored service to portions of the west bank of Jefferson Parish, including West Jefferson Hospital, Entergy's Gretna Control Center, Jefferson Parish EOC, Gretna Police Department, Gretna Fire Station, Gretna Water Works and Jefferson Parish Sewer Plant. On the east bank of Jefferson Parish, power has been restored to East Jefferson General Hospital, Ochsner Clinic Foundation and the Louis Armstrong International Airport. Aerial damage assessments throughout southeast Louisiana.
- Entergy reports that there has also been extensive damage to Entergy's gas distribution system which has affected service to many of Entergy's 147,000 natural gas customers in New Orleans. Entergy will have to shut off gas service in many areas of the New Orleans before repairs can be made. This will help reduce gas leakage in the city which will help with public safety and aid in restoration of the gas system. Entergy says that it is working to preserve gas flow to the New Orleans Sewage and Water Board (SWB) in order to allow power generation for SWB pumps that are critical to the mission of pumping water out of flooded areas of the city.
- Entergy has more than 9,000 line and vegetation workers, plus support, committed to restoring service. This includes Entergy workers and crews from a large number of states arriving to provide support in the restoration effort.
- Entergy, which provides power to a large share of electric customers in the affected region, is establishing an interim corporate headquarters in Clinton, Miss, a suburb of the Jackson, Miss., metropolitan area, for the post-hurricane period when it will not be able to operate its existing headquarters in New Orleans.
- Mississippi Electric Power Associations has 5,350 workers involved in the restoration. More than 50,000 utility poles were destroyed.
- As of 6 PM Saturday, Mississippi Power Company (MPC) had restored transmission service to two-thirds of their load serving substations. This means that these substations are ready to serve customers when the distribution lines are restored to service. They are currently working to restore the 230kV loop through MPC by this weekend. Several 115kV lines are now energized and service has been restored to about half of MPC's load serving substations. New damage assessments indicate more than 750 miles of lines are on the ground across Mississippi Power's system. Nearly 5,000 poles will have to be replaced, and thousands more repaired.
- Mississippi Power has been able to restore service to numerous essential customers such as hospitals, city water wells and lift stations, and substations that serve wholesale electric cooperative customers. Workers are continuing to try to re-energize substations serving the company's hardest hit areas in Bay St. Louis and Pass Christian, many of which were flooded and suffered extensive damage. Mississippi Power expects to have nearly 8,000 outside workers overall, which have been arriving sooner than previously anticipated from 13 states and Canada.

Florida

- Utilities in Florida report that although natural gas supplies are tight the situation continues to improve. Petroleum supplies to utilities are considered to be adequate. Florida Reliability Coordinating Council is considering stopping their daily utility calls today.
- **The Panhandle region continues to be short on fuel supplies.** The Secretary of the Department of Environmental Protection has notified fuel dealers to coordinate with their suppliers to obtain needed deliveries.